

ing needs and priorities changed from admission to discharge. Ten SCT patients completed both pre- and post-evaluation surveys. Results of this study highlight the need for greater attention to the psychosocial needs of transplant patients during the pre- and post-transplant period. Patients rated psychosocial issues very high on importance, but rated the teaching they received to help them deal with these concerns as relatively low. More attention should be devoted to the psychosocial needs and concerns of transplant patients throughout the entire SCT process. Learning about complimentary therapies that may be helpful in symptom management was not considered important to SCT patients, nor did they feel the teaching they received helped them to understand complimentary therapies. Further study regarding the role of complimentary therapy in SCT and how patients are educated about these therapies is needed. Patients value knowing as much as possible about SCT, but commented that the large quantity of complex information limited their ability to retain the information they were given about transplantation. Both the timing and "dosage" of patient education about SCT requires additional study. Educating patients about SCT may be best accomplished in small doses with content that varies across different phases throughout the transplant process.

## 266

### SPERM QUALITY ACCORDING TO THE DISEASE AND TREATMENT PRE STEM CELL TRANSPLANTATION

Choi, S.<sup>1</sup>; Kim, K.<sup>1</sup>; Bok, J.<sup>1</sup>; Im, J.<sup>1</sup>; Kim, H.<sup>2</sup> 1. St.Mary Hospital, Catholic HSCT, Seoul, Korea, South Korea; 2. Catholic University of Korea College of Nursing, Seoul, Korea, South Korea.

Stem cell transplantation is widely used method for the treatment of hematological malignancy and offers potential long-term survival. But cancer patient has defective sperm and low sperm counts as a consequence of the disease and its treatment. Irradiation and chemotherapy each compromise fertility by exerting cytotoxic effects on gametogenesis. The degree of gonadal effect is governed by the therapeutic regimen(i.e., type, dose, schedule) and duration of treatment. This study was evaluated the sperm quality before stem cell transplantation. Records of 50 patients with hematological malignance, who banked their sperm between Aug. 1998 and Aug. 2001, were reviewed. The acute leukemia group had undergone chemotherapy or radiation therapy before sperm banking. CML group had undergone conservative treatment. Some patients of SAA group had got ALG treatment. The sperm quality was examined by Volume, MSC(motile sperm count) and Motility. 60% of all the patients were oligospermic( $20 \times 10^6/\text{mL}$ ). Oligospermia occurred in 72% of the patients in Acute leukemia(n=13), 82% in the CML(n=14), and 20% in SAA(n=3). Total sperm volume did not differ significantly between the three groups. Compared with the other two leukemia group, patients in SAA group had higher MSC( $p=0.0002$ ) and Motility( $p=0.0181$ ). Sperm quality of SAA did not differ significantly between ALG treatment group and no treatment group. In conclusion, sperm quality of the leukemia patient who had got chemotherapy or radiation treatment was poor. The currently preferred practice for patients with cancer is to collect sperm before initiation of chemotherapy; therefore careful consideration of each individual's case must be the rule when determining how long therapy can be delayed without jeopardizing the patient's health. As cancer therapy may further impair sperm quality, patients should be offered the chance to bank sperm before undergoing cancer therapy.

	Volume(mL) Median(Range)	$\chi^2$ (p)	MSC( $\times 10^6/\text{mL}$ ) Median(Range)	$\chi^2$ (p)	Motility(%) Median(Range)	$\chi^2$ (p)
Acute Leukemia	2.6(0.6-5.0)		2.0(0.1-64.6)		25.1(0.1-55)	
CML	2.8(0.8-6.0)	1.32(0.51)	2.5(0.0-91.0)	16.62(0.0002)	21.5(0.0-65)	8.02(0.0181)
SAA	2.1(0.2-7.6)		33.0(9.8-151.0)		44.0(20-55)	
Total	2.6(0.6-7.6)		10.0(0.0-151)		31.4(0-65)	

## 267

### DEVELOPING A DATA SYSTEM TO MONITOR INFECTIOUS COMPLICATIONS AND MAKE CLINICAL DECISIONS BASED ON READILY ACCESSIBLE DATA

Johns, A.A.; Margolese-Malin, L. Adult BMT Program, Duke University Medical Center, Durham, NC.

Susceptibility to infections continues to be a major source of morbidity and mortality during the course of hematopoietic cell transplantation (HCT). Advances in infection control including the use of growth factors, new antibiotics and strategies to prevent infections have improved survival rates and outcomes. However, resistant bacteria, latent viruses and fungal pathogens continue to challenge the success of HCT. As transplant programs investigate novel approaches to transplant including the use of reduced intensity transplants, utilizing alternative donor sources, and experimenting with new agents to prevent or treat GVHD, the pattern and timing of pathogens may be altered. Transplant centers monitor and report infectious complications on a routine basis and institute measures to reduce the incidence of serious infections. Duke University Medical Center Adult HCT Program has developed an integrated data management system that allows the clinical staff to review infectious complications in relationship to a number of parameters. As the faculty continue to develop novel approaches to transplant, treat older patients, manipulate grafts, utilize new conditioning regimens and treat different underlying diseases, the emergence of opportunistic infections can be not only monitored but can also be linked to a number of variables. To ensure a comprehensive, authoritative base of information for ongoing analysis and review, Duke HCT has arranged for automated data feeds from other programs such as Microbiology, Infection Control, and Pulmonary Medicine. Further automation merges data from these external sources with Duke HCT own internal database. The results are then used to populate a number of analysis templates for quarterly review. Correlations and trends can be established for any or all of the variables listed above, and can be examined from both high level: program as whole, allogeneic, non-ablative cord blood or autologous transplants, and from lower level: by disease, protocol, gender, age, conditioning regimen, and GVHD prophylaxis. Because the data gathering and presentation require little manual intervention, the results are readily available to clinical and administrative staff. With these data in hand, staff can more easily discern statistically significant trends and take remedial action quickly and efficiently.

## 268

### ENSURING ACCURACY OF OUTPATIENT MEDICATION ADMINISTRATION FOR THE PEDIATRIC BONE MARROW TRANSPLANT PATIENT

Van Stelle, J.L.<sup>1</sup>; Pasut, B.<sup>1</sup>; Endrud, L.<sup>2</sup>; Sickel, A.<sup>1</sup> 1. The Children's Hospital, Denver, CO; 2. University of Colorado School of Medicine, Denver, CO.

The Bone Marrow Transplant (BMT) program at The Children's Hospital (TCH) in Denver, Colorado serves patients from the Rocky Mountain Area that includes nine states plus patients referred from other countries. The patients ages range from birth to the late twenties. The transplants are autologous and allogeneic including matched related, unrelated, and cord blood. BMT patients are on between 6 and 20 medications as part of their supportive care in the post transplant time period. Nurses play a valuable role in educating patients and families of the importance and interactions of their medications, evaluating compliance issues, and problem-solving roadblocks to successful medication administration. Home medication teaching is a multidisciplinary process involving nurses, pharmacy and physicians. The process begins in-patient weeks prior to discharge and continues at each outpatient clinic visit. We will show several tools that help patients with safe medication administration. These are available in English and Spanish. Tools include: patient/parent medication list including side effects, clinic medication tracking list, patient/parent instruction form (given with any medication change during the clinic visit), patient/parent medication checklist for home use, and medication calendars. In spite of this thorough medication